

## What is claimed is:

- [c1] 1. A rings-based system, comprising:
  - a plurality of ring members on a ring network that communicate using point-to-point connectivity;
  - a message traversing the ring from member to member;
  - the system being adapted so that upon the message arriving at a given ring member the message is processed by that ring member if the message is applicable to that ring member, and if the message is not applicable to that ring member, the message is passed on to the next ring member; and
  - wherein the message causes a reset of the given ring member if the message is applicable to that ring member.
- [c2] 2. The system of claim 1, wherein the message includes address information corresponding to the given ring member.
- [c3] 3. The system of claim 1, wherein the message is an activate message that includes at least one bit for causing a reset.
- [c4] 4. The system of claim 1, wherein the reset is a soft reset.
- [c5] 5. The system of claim 1, wherein the message causes a reset by writing at least one bit from the message into a ring interface for the given member.
- [c6] 6. The system of claim 5, wherein the ring interface includes a bit that is reset by the message.
- [c7] 7. The system of claim 6, wherein the bit is an activated bit.
- [c8] 8. The system of claim 6, wherein the bit is a reset bit.
- [c9] 9. The system of claim 5, wherein the ring interface provides an output to the given ring member for causing the reset.
- [c10] 10. The system of claim 9, wherein the output is a control pin coupled to the given ring member.
- [c11] 11. A rings-based system, comprising:

a plurality of ring members on a ring network that communicate using point-to-point connectivity;  
a message traversing the ring from member to member;  
the system being adapted so that upon the message arriving at a given ring member the message is processed by that ring member if the message is applicable to that ring member, and if the message is not applicable to that ring member, the message is passed on to the next ring member; and  
further comprising a reset control signal that causes multiple members of the ring network to be reset.

[c12] 12.The system of claim 11, wherein the reset control signal is a hardware signal that is sent independent of the message.

[c13] 13.The system of claim 11, wherein the reset control signal is sent on a different line from the message.

[c14] 14.The system of claim 11, wherein the reset control signal causes all ring members except for the member from which the reset signal originates to be reset.

[c15] 15.The system of claim 11, wherein the reset is a hard reset.

[c16] 16.The system of claim 11, wherein the reset control signal causes a reset by causing the reset of bits in ring interfaces corresponding to the multiple members.

[c17] 17.The system of claim 16, wherein the ring interfaces provide an output to their corresponding ring members to cause the resets.

[c18] 18.The system of claim 17, wherein the outputs are control pins coupled to the corresponding ring members.

[c19] 19.A rings-based system, comprising:  
a plurality of ring members on a ring network that communicate using point-to-point connectivity;  
a message traversing the ring from member to member;  
the system being adapted so that upon the message arriving at a given ring

member the message is processed by that ring member if the message is applicable to that ring member, and if the message is not applicable to that ring member, the message is passed on to the next ring member; and wherein the system includes a message that can cause a reset of the given ring member if the message is applicable to that ring member; and wherein the system further includes a reset control signal that causes multiple members of the ring network to be reset.

[c20] 20.The system of claim 19, wherein the message that can cause a reset causes a soft reset of the given ring member and wherein the reset control signal causes hard resets of the multiple members.